

01-29-2002

ocket No.: 050526/0002

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Tab settings → → →

101950305

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
HEMOSOL INC.

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment

☐ Merger

☒ Security Agreement

☐ Change of Name

☐ Other

Execution Date: **NOVEMBER 24, 2000**

2. Name and address of receiving party(ies):

Name: **The Manufacturers Life Insurance Company**

Address: **200 BLOOR STREET EAST**

City: **TORONTO**

State/Prov.: **Ontario**

Country: **CANADA**

ZIP: **M4W 1E5**

Additional name(s) & address(es)

☐ Yes ☒ No

4. Application number(s) or registration numbers(s):

If this document is being filed together with a new application, the execution date of the application is:

Patent Application No.

Filing date

B. Patent No.(s)

SEE ATTACHED

**SEE ATTACHED
SCHEDULE**

Additional numbers

☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **PAUL A. JUERGENSEN**

Registration No.

Address: **SCHULTE ROTH & ZABEL LLP**

919 THIRD AVENUE

City: **NEW YORK**

State/Prov.: **NY**

Country: **USA**

ZIP: **10022**

6. Total number of applications and patents involved:

15

7. Total fee (37 CFR 3.41): \$ **600.00**

☐ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☒ Authorized to be charged to deposit account

8. Deposit account number:

SCHULTE ROTH & ZABEL LLP - 500675

Charge Fee

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

PAUL A. JUERGENSEN

Name of Person Signing

Signature

MAY 17, 2001

Date

FROM SCHULTE ROTH & ZABEL LLP #2 (THU) 1.24.02 13:13/ST. 12:59/NO. 4260783314 P 12

PATENT

REEL: 012333 FRAME: 0801

SCHEDULE 1A
U.S. PATENTS AND PATENT APPLICATIONS

TITLE	PATENT NO./APPLICATION NO.
Pasteurizable, Freeze-Driable Hemoglobin-Based Blood Substitute	4,857,636
Pasteurizable, Freeze-Driable Hemoglobin-Based Blood Substitute	5,189,146
Pasteurizable, Freeze-Driable Hemoglobin-Based Blood Substitute	5,364,932
Selective Crosslinking of Hemoglobin by Oxidized, Ring-Opened Saccharides	5,532,352
Selective Crosslinking of Hemoglobin by Oxidized, Ring-Opened Saccharides	5,770,727
Displacement Chromatography Process	5,459,591
Displacement Chromatography Process	5,545,328
Methods For The Selective Expansion of Lymphocytes By In Vitro Cultivation	6,194,207
Method For Production of T Cells	60/194,033
The Efficient Culture of Stem Cells For the Production of Hemoglobin	09/339,838
Development of Regulatory Cells As A Means of Treating Autoimmune Disease	09/238,575
Efficient Ex Vivo Expansion of CD4 and CD8 T Cells From HIV Infected Subjects	09/296,402
Enhanced Stimulation of Erythropoiesis	08/917,913
Hemoglobin-Polysaccharide Conjugates	09/276,686
Hemoglobin-Haptoglobin Complexes	09/302,351

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FROM SCHULTE ROHN & ZABEL LLP a2

PATENT
REEL: 012333 FRAME: 0802

**ASSIGNMENT FOR SECURITY
(PATENTS)**

WHEREAS the Borrower, Hemosol Inc. (the "Assignor") holds all right, title and interest in (or is a joint owner or licensee of) the letter patents, design patents, utility patents and applications for the foregoing listed on the annexed Schedule 1A, which patents and patent applications are subsisting in the United States Patent and Trademark Office (the "Patents");

WHEREAS the Assignor has entered into a General Security Agreement dated as of November 24, 2000 (as amended or otherwise modified from time to time, the "Security Agreement") in favour of the Lender, the Manufacturers Life Insurance Company (the "Assignee");

WHEREAS pursuant to the Security Agreement, the Assignor has assigned to the Assignee and granted to the Assignee a security interest and mortgage in all right, title and interest of the Assignor in, to and under the Patents and all proceeds thereof, including, without limitation, any and all causes of action that may exist by reason of violation thereof and any and all damages arising from past, present and future violations thereof (the "Collateral") to secure the payment, performance and observance of the Obligations (as defined in the Security Agreement);

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignor does hereby convey, sell, assign, transfer and set over unto the Assignee and grants to the Assignee a security interest and mortgage in the Collateral to secure the prompt payment, performance and observance of the Obligations.

The Assignor does hereby further acknowledge and affirm that the rights and remedies of the Assignee with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein.

This Assignment For Security (Patents) shall not be interpreted to grant any rights to the Assignee or the Assignor or impose any obligations on the Assignee or the Assignor in addition to or different from those set forth in the Security Agreement. The terms and provisions of the Security Agreement prevail and are paramount over this Assignment For Security (Patents).

IN WITNESS WHEREOF the Assignor has caused this Assignment For Security (Patents) to be duly executed by its officer thereunto duly authorized as of November 24, 2000.

BORROWER

By: _____

Name: _____

Title: _____

David Bell
DAVID BELL
C.P. DEPT. DEVELOPMENT
REGULATORY AFFAIRS
HEMOSOL, INC.

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FROM SCHULTE ROTH & ZABEL LLP a2
PATENT

REEL: 012333 FRAME: 0803

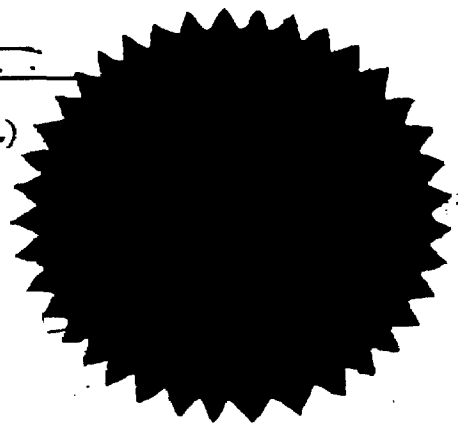
CERTIFICATE OF ACKNOWLEDGEMENT

City of Toronto, Province of Ontario

On this 9th day of May, 2001, before me, the undersigned, personally appeared David Bell, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity and that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

Ant. No. 5.

(NOTARY SEAL)



SCHEDULE 1A
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Hemoglobin-Polysaccharide Conjugates	09/276,686
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RECORDED: 05/17/2001

FROM SCHULTE ROTH & ZABEL LLP a2

PATENT

REEL: 012333 FRAME: 0805